

In the Claims

Please amend the claims as follows.

1. **(Currently Amended)** A telecommunications component comprising:
 - a circuit board;
 - a first multi-pair cable connector mounted on the circuit board for inputting twisted pair, mixed ~~data/voice~~ data and voice signals to the circuit board;
 - a second multi-pair cable connector mounted on the circuit board for outputting twisted pair, voice signals from the circuit board;
 - a third multi-pair cable connector mounted on the circuit board for outputting twisted pair, data signals or mixed ~~data/voice~~ data and voice signals from the circuit board;
 - one or more card edge connectors connected to the circuit board, the one or more card edge connectors including:
 - a group of normally closed contacts;
 - a group of normally open contacts, all of the normally open contacts being grouped separately from the normally closed contacts;
 - first tracings provided on the circuit board for connecting the first multi-pair cable connector to the normally closed contacts;
 - second tracings provided on the circuit board for connecting the normally closed contacts to the second multi-pair cable connector;
 - third tracings provided on the circuit board for connecting the normally open contacts to the third multi-pair cable connector;
 - the tracings being positioned such that none of the third tracings on the circuit board cross-over any of the first or second tracings; and
 - a splitter card having one or more card edge connectors that connect ~~adapted for connection~~ to the one or more card edge connectors of the circuit board, the splitter card including a plurality of splitters for splitting the mixed ~~data/voice~~ data and voice signals into the data signals and the voice signals.

2. (Cancelled)
3. (Previously Presented) The telecommunications component of claim 1, wherein the splitters comprise POTS splitters.
4. (Original) The telecommunications component of claim 3, wherein the splitter card includes at least 24 of the POTS splitters.
5. **(Currently Amended)** The telecommunications component of claim 1, wherein the one or more card edge connectors of the circuit board include a first card edge connector and a separate second card edge connector, the first card edge connector including the normally closed contacts and the second card edge connector including the normally open contacts.

Claims 6-8 (Cancelled)

9. (Original) The telecommunications component of claim 1, further comprising a chassis including a reference back plane at which the first, second and third multi-pair cable connectors are positioned, the circuit board being aligned generally at a perpendicular orientation relative to the reference back plane.
10. **(Currently Amended)** The telecommunications component of claim 9, wherein the splitter card is aligned at a generally parallel orientation relative to the circuit board when the splitter card and the circuit board are is connected to by the one or more card edge connectors.
11. (Cancelled)
12. (Cancelled)

13. (Original) The telecommunications component of claim 9, wherein the chassis includes opposing slots, wherein the circuit board is mounted in the slots.

14. (Currently Amended) The telecommunications component of claim 13, wherein the splitter card and the circuit board are mounted in the same opposing slots when the splitter card and the circuit board are is connected ~~to the circuit board~~ by the ~~first and second~~ card edge connectors.

15. (Currently Amended) A telecommunications component comprising:

a chassis defining a reference back plane;

an interface card mounted at the reference back plane of the chassis, the interface card including:

a circuit board positioned at an orientation generally perpendicular with respect to the back plane;

a first multi-pair cable connector mounted on the circuit board and positioned at the back plane for inputting twisted pair, mixed ~~data/voice~~ data and voice signals to the circuit board;

a second multi-pair cable connector mounted on the circuit board and positioned at the back plane for outputting twisted pair, voice signals from the circuit board;

a third multi-pair cable connector mounted on the circuit board and positioned at the back plane for outputting twisted pair, data signals or mixed ~~data/voice~~ data and voice signals from the circuit board;

one or more card edge connectors connected to the circuit board, the one or more card edge connectors including normally closed contacts and normally open contacts;

first tracings provided on the circuit board for connecting the first multi-pair cable connector to the normally closed contacts;

second tracings provided on the circuit board for connecting the normally closed contacts to the second multi-pair cable connector; and

third tracings provided on the circuit board for connecting the normally open contacts to the third multi-pair cable connector; and

a splitter card having one or more card edge connectors that connect ~~adapted for connection~~ to the one or more card edge connectors of the circuit board, the splitter card including a plurality of splitters for splitting the mixed ~~data/voice~~ data and voice signals into the data signals and the voice signals, the splitter card being aligned at a generally parallel orientation relative to the circuit board when the splitter card is connected to the circuit board ~~one or more card edge connectors~~.

16. (Cancelled)

17. (Previously Presented) The telecommunications component of claim 15, wherein the splitters comprise POTS splitters.

18. (Original) The telecommunications component of claim 17, wherein the splitter card includes at least 24 of the POTS splitters.

19. (Original) The telecommunications component of claim 15, wherein the chassis includes opposing slots, wherein the circuit board is mounted in the slots.

20. (Previously Presented) The telecommunications component of claim 19, wherein the splitter card and the circuit board are mounted in the same opposing slots when the circuit board and the splitter card are interconnected by the card edge connectors.

21. (Original) The telecommunications component of claim 15, wherein a plurality of the interface cards are mounted within the chassis.

22. (Original) The telecommunications component of claim 15, wherein the chassis is sized to hold a single one of the interface card.

23. **(Currently Amended)** The telecommunications component of claim 15, wherein all of the normally closed contacts are provided on a first card edge connector of the circuit board, and all of the normally open contacts are provided on a separate second card edge connector of the circuit board.

24. **(Currently Amended)** The telecommunications component of claim 23, wherein the splitter card has first and second card edge connectors that connect ~~is adapted for connection~~ to the first and second card edge connectors of the circuit board, the splitter card being aligned at the generally parallel orientation relative to the circuit board when the splitter card and the circuit board are ~~is connected to~~ by the ~~first and second~~ card edge connectors.

25. (Cancelled)

26. (Cancelled)

27. **(Currently Amended)** The telecommunications component of claim 23, wherein the splitter card has first and second card edge connectors that connect ~~is adapted for connection~~ to the first and second card edge connectors of the circuit board, the splitter card and the circuit board being mounted in a common pair of opposing slots defined by the chassis.

Claim 28-36 (Cancelled)

37. **(Currently Amended)** A telecommunications component comprising:
a chassis defining a reference back plane;
an interface card mounted at the reference back plane of the chassis, the interface card including:
a circuit board positioned at an orientation generally perpendicular with respect to the back plane;

a first cable connector mounted to the circuit board and positioned at the back plane for inputting twisted pair, mixed ~~data/voice~~ data and voice signals to the circuit board;

a second cable connector mounted to the circuit board and positioned at the back plane for outputting twisted pair, voice signals from the circuit board;

a third cable connector mounted to the circuit board and positioned at the back plane for outputting twisted pair, data signals or mixed ~~data/voice~~ data and voice signals from the circuit board; and

one or more card edge connectors connected to the circuit board, the one or more card edge connectors including contacts electrically connected to the cable connectors by the circuit board; and

a POTS splitter card mounted in the chassis and electrically connected to the card edge connector of the interface card.

38. (Previously Presented) The telecommunications component of claim 37, wherein the contacts of the one or more card edge connectors include normally closed contacts electrically connected to the first and second cable connectors.

39. (Previously Presented) The telecommunications component of claim 37, wherein a plurality of the interface cards are mounted at the reference back plane of the chassis, the plurality of interface cards having circuit boards oriented generally perpendicular with respect to the reference back plane.

40. (Previously Presented) The telecommunications component of claim 39, wherein the plurality of interface cards include 24 generally parallel interface cards.

41. (Cancelled)

42. (Previously Presented) The telecommunications component of claim 37, wherein the POTS splitter card and the interface card are generally co-planar.

43. (Previously Presented) The telecommunications connector of claim 39, further comprising a plurality of POTS splitter cards mounted in the chassis and electrically connected to the card edge connectors of the interface cards.

44. **(Currently Amended)** A telecommunications component comprising:

a chassis having a front and a back, the front being adapted for allowing splitter cards to be inserted into the chassis;

an interface card mounted adjacent the back of the chassis, the interface card including:

a circuit board having front and back ends and major side surfaces that extend between front and back ends, the circuit board being oriented such that the major side surfaces extend between the front and back of the chassis with the back end ~~being~~ of the circuit board being positioned adjacent the back of the chassis;

first, second and third cable connectors mounted to the circuit board adjacent the back end of the circuit board; and

one or more card edge connectors mounted to the circuit board adjacent the front end of the circuit board, the one or more card edge connectors including contacts electrically connected to the cable connectors by the circuit board; and

a POTS splitter card mounted in the chassis and electrically connected to the card edge connector of the interface card.

45. (Previously Presented) The telecommunications component of claim 44, wherein the contacts of the one or more card edge connectors include normally closed contacts.

46. (Previously Presented) The telecommunications component of claim 44, wherein a plurality of the interface cards are mounted at the back of the chassis, the plurality of interface cards having circuit boards oriented generally parallel relative to one another.

47. (Previously Presented) The telecommunications component of claim 46, wherein the plurality of interface cards include 24 generally parallel interface cards.

48. (Cancelled)

49. (Previously Presented) The telecommunications component of claim 44, wherein the POTS splitter card and the interface card are generally co-planar.

50. (Previously Presented) The telecommunications connector of claim 46, further comprising a plurality of POTS splitter cards mounted in the chassis and electrically connected to the card edge connectors of the interface cards.

51. (Previously Presented) A telecommunications component comprising:
a chassis;
a plurality of interface cards secured to the chassis, the interface cards each including:

a circuit board having first and second opposite ends;
first, second and third cable connectors mounted adjacent the first end of the circuit board; and
one or more card edge connectors mounted adjacent the second end of the circuit board, the one or more card edge connectors including contacts electrically connected to the cable connectors by the circuit board; and
a POTS splitter card mounted in the chassis and electrically connected to the card edge connector of the interface card.

52. (**Currently Amended**) A telecommunications component comprising:
a circuit board;
a first multi-pair cable connector for inputting twisted pair, mixed ~~data/voice~~ data and voice signals to the circuit board;
a second multi-pair cable connector for outputting twisted pair, voice signals from the circuit board;
a third multi-pair cable connector for outputting twisted pair, data signals or mixed ~~data/voice~~ data and voice signals from the circuit board;

one or more card edge connectors connected to the circuit board, the one or more card edge connectors including:

a group of normally closed contacts;

a group of normally open contacts, all of the normally open contacts being grouped separately from the normally closed contacts;

first tracings provided on the circuit board for connecting the first multi-pair cable connector to the normally closed contacts;

second tracings provided on the circuit board for connecting the normally closed contacts to the second multi-pair cable connector;

third tracings provided on the circuit board for connecting the normally open contacts to the third multi-pair cable connector;

the tracings being positioned such that none of the third tracings on the circuit board cross-over any of the first or second tracings; and

a splitter card having one or more card edge connectors that connect ~~adapted for connection~~ to the one or more card edge connectors of the circuit board, the splitter card including at least 24 POTS splitters for splitting the mixed ~~data/voice~~ data and voice signals into the data signals and the voice signals.

53. **(Currently Amended)** A telecommunications component comprising:

a circuit board;

a first multi-pair cable connector for inputting twisted pair, mixed ~~data/voice~~ data and voice signals to the circuit board;

a second multi-pair cable connector for outputting twisted pair, voice signals from the circuit board;

a third multi-pair cable connector for outputting twisted pair, data signals or mixed ~~data/voice~~ data and voice signals from the circuit board;

a first card edge connector connected to the circuit board, the first card edge connector including a group of normally closed contacts;

a separate second card edge connector connected to the circuit board, the second card edge connector including a group of normally open contacts;

first tracings provided on the circuit board for connecting the first multi-pair cable connector to the normally closed contacts;

second tracings provided on the circuit board for connecting the normally closed contacts to the second multi-pair cable connector;

third tracings provided on the circuit board for connecting the normally open contacts to the third multi-pair cable connector;

the tracings being positioned such that none of the third tracings on the circuit board cross-over any of the first or second tracings; and

a splitter card having one or more card edge connectors that connect ~~adapted for connection~~ to the first and second card edge connectors of the circuit board, the splitter card including a plurality of splitters for splitting the mixed ~~data/voice~~ data and voice signals into the data signals and the voice signals.

54. (Cancelled)

55. (Previously Presented) The telecommunications component of claim 53, wherein the splitters comprise POTS splitters.

56. (Previously Presented) The telecommunications component of claim 55, wherein the splitter card includes at least 24 of the POTS splitters.

57. **(Currently Amended)** A telecommunications component comprising:

a chassis including a reference back plane;

a circuit board aligned generally at a perpendicular orientation relative to the reference back plane;

a first multi-pair cable connector positioned at the reference back plane for inputting twisted pair, mixed ~~data/voice~~ data and voice signals to the circuit board;

a second multi-pair cable connector positioned at the reference back plane for outputting twisted pair, voice signals from the circuit board;

a third multi-pair cable connector positioned at the reference back plane for outputting twisted pair, data signals or mixed ~~data/voice~~ data and voice signals from the circuit board;

one or more card edge connectors connected to the circuit board, the one or more card edge connectors including:

a group of normally closed contacts;

a group of normally open contacts, all of the normally open contacts being grouped separately from the normally closed contacts;

first tracings provided on the circuit board for connecting the first multi-pair cable connector to the normally closed contacts;

second tracings provided on the circuit board for connecting the normally closed contacts to the second multi-pair cable connector;

third tracings provided on the circuit board for connecting the normally open contacts to the third multi-pair cable connector;

the tracings being positioned such that none of the third tracings on the circuit board cross-over any of the first or second tracings; and

a splitter card having one or more card edge connectors that connect ~~adapted for connection~~ to the one or more card edge connectors of the circuit board, the splitter card including at least 24 POTS splitters for splitting the mixed ~~data/voice~~ data and voice signals into the data signals and the voice signals, the splitter card being aligned at a generally parallel orientation relative to the circuit board when the splitter card is connected to the one or more card edge connectors.

58. **(Currently Amended)** A telecommunications component comprising:

a chassis defining a reference back plane;

an interface card mounted at the reference back plane of the chassis, the interface card including:

a circuit board positioned at an orientation generally perpendicular with respect to the back plane;

a first multi-pair cable connector positioned at the back plane for inputting twisted pair, mixed ~~data/voice~~ data and voice signals to the circuit board;

a second multi-pair cable connector positioned at the back plane for outputting twisted pair, voice signals from the circuit board;

a third multi-pair cable connector positioned at the back plane for outputting twisted pair, data signals or mixed ~~data/voice~~ data and voice signals from the circuit board;

one or more card edge connectors connected to the circuit board, the one or more card edge connectors including normally closed contacts and normally open contacts;

first tracings provided on the circuit board for connecting the first multi-pair cable connector to the normally closed contacts;

second tracings provided on the circuit board for connecting the normally closed contacts to the second multi-pair cable connector;

third tracings provided on the circuit board for connecting the normally open contacts to the third multi-pair cable connector; and

a splitter card having one or more card edge connectors that connect ~~adapted for connection~~ to the one or more card edge connectors of the circuit board, the splitter card including at least 24 POTS splitters for splitting the mixed ~~data/voice~~ data and voice signals into the data signals and the voice signals, the splitter card being aligned at a generally parallel orientation relative to the circuit board when the splitter card is connected to the one or more card edge connectors.

59. **(Currently Amended)** A telecommunications component comprising:

a chassis defining a reference back plane;

an interface card mounted at the reference back plane of the chassis, the interface card including:

a circuit board positioned at an orientation generally perpendicular with respect to the back plane;

a first multi-pair cable connector positioned at the back plane for inputting twisted pair, mixed ~~data/voice~~ data and voice signals to the circuit board;

a second multi-pair cable connector positioned at the back plane for outputting twisted pair, voice signals from the circuit board;

a third multi-pair cable connector positioned at the back plane for outputting twisted pair, data signals or mixed ~~data/voice~~ data and voice signals from the circuit board;

one or more card edge connectors connected to the circuit board, the one or more card edge connectors including normally closed contacts and normally open contacts, wherein all of the normally closed contacts are provided on a first card edge connector, and all of the normally open contacts are provided on a separate second card edge connector;

first tracings provided on the circuit board for connecting the first multi-pair cable connector to the normally closed contacts;

second tracings provided on the circuit board for connecting the normally closed contacts to the second multi-pair cable connector;

third tracings provided on the circuit board for connecting the normally open contacts to the third multi-pair cable connector; and

a splitter card having one or more card edge connectors that connect adapted for connection to the first and second card edge connectors, the splitter card including a plurality of splitters for splitting the mixed ~~data/voice~~ data and voice signals into the data signals and the voice signals, the splitter card being aligned at a generally parallel orientation relative to the circuit board when the splitter card is connected to the first and second card edge connectors.

60. (Cancelled)

61. (Previously Presented) The telecommunications component of claim 59, wherein the splitters comprise POTS splitters.

62. (Previously Presented) The telecommunications component of claim 61, wherein the splitter card includes at least 24 of the POTS splitters.

63. (Previously Presented) The telecommunications component of claim 59, wherein the splitter card and the circuit board are mounted in a common pair of opposing slots defined by the chassis.

Claims 64-68 (Cancelled)

69. (Previously Presented) A telecommunications chassis assembly, comprising:

a chassis defining a back plane;

a plurality of backplane circuit boards mounted perpendicular to the back plane, each of the backplane circuit boards including:

first, second, and third cable connectors mounted on a first edge of the backplane circuit board;

a plurality of splitter cards mounted within the chassis, each of the splitter cards including a plurality of POTS splitters, each of the splitter cards being perpendicular to the back plane;

a plurality of card edge connectors arranged to electrically interconnect each of the backplane circuit boards with one of the plurality of splitter cards;

wherein each of the card edge connectors includes a first card edge connector piece and a second card edge connector piece, the first card edge connector piece is mounted on a second opposite edge of the backplane circuit board, and the second card edge connector piece is mounted on the splitter card.

70. (Currently Amended) A telecommunications component comprising:

a circuit board;

a first multi-pair cable connector mounted on the circuit board for inputting twisted pair, mixed ~~data/voice~~ data and voice signals to the circuit board;

a second multi-pair cable connector mounted on the circuit board for outputting twisted pair, voice signals from the circuit board;

a third multi-pair cable connector mounted on the circuit board for outputting twisted pair, data signals or mixed ~~data/voice~~ data and voice signals from the circuit board;

one or more card edge connectors connected to the circuit board, the one or more card edge connectors including:

a group of normally closed contacts;

a group of normally open contacts, all of the normally open contacts being grouped separately from the normally closed contacts;

the one or more card edge connectors including a first card edge connector and a separate second card edge connector, the first card edge connector including the normally closed contacts and the second card edge connector including the normally open contacts

first tracings provided on the circuit board for connecting the first multi-pair cable connector to the normally closed contacts;

second tracings provided on the circuit board for connecting the normally closed contacts to the second multi-pair cable connector;

third tracings provided on the circuit board for connecting the normally open contacts to the third multi-pair cable connector;

the tracings being positioned such that none of the third tracings on the circuit board cross-over any of the first or second tracings; and

a splitter card having one or more card edge connectors that connect ~~adapted for connection~~ to the first and second card edge connectors of the circuit board, the splitter card including a plurality of splitters for splitting the mixed ~~data/voice~~ data and voice signals into the data signals and the voice signals.

71. (Previously Presented) The telecommunications component of claim 70, wherein the splitters comprise POTS splitters.

72. (Previously Presented) The telecommunications component of claim 71, wherein the splitter card includes at least 24 of the POTS splitters.

73. **(Currently Amended)** A telecommunications component comprising:

a chassis defining a reference back plane, the chassis including opposing slots;

an interface card mounted at the reference back plane of the chassis, the interface card including:

a circuit board positioned at an orientation generally perpendicular with respect to the back plane, the circuit board being mounted in the opposing slots of the chassis;

a first multi-pair cable connector mounted on the circuit board and positioned at the back plane for inputting twisted pair, mixed ~~data/voice~~ data and voice signals to the circuit board;

a second multi-pair cable connector mounted on the circuit board and positioned at the back plane for outputting twisted pair, voice signals from the circuit board;

a third multi-pair cable connector mounted on the circuit board and positioned at the back plane for outputting twisted pair, data signals or mixed ~~data/voice~~ data and voice signals from the circuit board;

one or more card edge connectors connected to the circuit board, the one or more card edge connectors including normally closed contacts and normally open contacts;

first tracings provided on the circuit board for connecting the first multi-pair cable connector to the normally closed contacts;

second tracings provided on the circuit board for connecting the normally closed contacts to the second multi-pair cable connector;

third tracings provided on the circuit board for connecting the normally open contacts to the third multi-pair cable connector; and

a splitter card having one or more card edge connectors that connect ~~adapted for connection~~ to the one or more card edge connectors of the circuit board, the splitter card including a plurality of splitters for splitting the mixed ~~data/voice~~ data and voice signals into the data signals and the voice signals, the splitter card and the circuit board being mounted in the same opposing slots when the circuit board and the splitter card are interconnected by the card edge connectors.

74. **(Currently Amended)** The telecommunications component of claim 73, wherein all of the normally closed contacts are provided on a first card edge connector of the circuit board, and all of the normally open contacts are provided on a separate second card edge connector of the circuit board.

75. **(Currently Amended)** The telecommunications component of claim 74, wherein the splitter card has first and second card edge connectors that connect ~~is adapted for connection~~ to the first and second card edge connectors of the circuit board.

76. **(Currently Amended)** A telecommunications component comprising:

- a chassis defining a reference back plane;
- an interface card mounted at the reference back plane of the chassis, the interface card including:
 - a circuit board positioned at an orientation generally perpendicular with respect to the back plane;
 - a first multi-pair cable connector positioned at the back plane for inputting twisted pair, mixed ~~data/voice~~ data and voice signals to the circuit board;
 - a second multi-pair cable connector positioned at the back plane for outputting twisted pair, voice signals from the circuit board;
 - a third multi-pair cable connector positioned at the back plane for outputting twisted pair, data signals or mixed ~~data/voice~~ data and voice signals from the circuit board;
 - one or more card edge connectors connected to the circuit board, the one or more card edge connectors including normally closed contacts and normally open contacts, wherein all of the normally closed contacts are provided on a first card edge connector, and all of the normally open contacts are provided on a separate second card edge connector;
 - first tracings provided on the circuit board for connecting the first multi-pair cable connector to the normally closed contacts;
 - second tracings provided on the circuit board for connecting the normally closed contacts to the second multi-pair cable connector;

third tracings provided on the circuit board for connecting the normally open contacts to the third multi-pair cable connector; and

a splitter card having one or more card edge connectors that connect adapted for connection to the first and second card edge connectors, the splitter card including a plurality of splitters for splitting the mixed ~~data/voice~~ data and voice signals into the data signals and the voice signals, the splitter card and the circuit board being mounted in a common pair of opposing slots defined by the chassis.